

# GALERIE MITTERRAND

**RAPHAËL ZARKA**

*TAUTOCHRONE*

23.05 > 27.07.2024

Opening Wednesday May 22nd, 2024

The fastest curve in the world. Behind the conciseness of this statement, worthy of a fairground attraction, lie several centuries of research and challenges between scientists to define the calculation of a cycloid. Nicknamed "the Helen of Geometers", it's hardly surprising that its history and properties have captured Raphaël Zarka's attention and curiosity, as his interests converge on movement and its applications, or more precisely on the objects, architectures, and devices capable of generating and measuring it.

While it may be necessary to refer here to the artist's "historicized approach to abstraction", which consists in identifying the recurrences and shifts over time and geography of geometric forms between different fields of knowledge, and translating them into the field of art, it should be remembered that his work is just as (in-)formed by the practice of skateboarding and its spaces, to which he has devoted several essays. It is no surprise, then, that he has traced this cycloidal curve from an article in a skateboarding magazine from 1985 to the physics cabinets of the 17th and 18th centuries, to the discovery of instruments (or replicas thereof) designed to observe its properties at Padua University's Museum of the History of Physics, then at Florence's Museo Galileo.

In the tradition of his "documentary sculptures", whose vocabulary refers to geometric abstraction by taking up "loaded" forms from the history of art, science, and technology, the *Tautochrone* (2007) which gives its title to the exhibition is a replica of a double-channel semicircular apparatus attributed to Galileo for studying the isochronism of pendulums. But as the artist explains, "it took many years before the problem of the isochronism of pendulums and its corollary, that of the tautochronous curve, was solved"<sup>1</sup> which, contrary to Galileo's belief, is not an arc of a circle, but a cycloid, as the artist materializes in the sculpture *Tautochrone vérifié* (2010).

From a mechanical instrument designed to study the movement of bodies in space to a skateboard ramp, from sculpture to architecture and vice versa, the artist's recent projects place this research on the scale of the human body and urban space. While *Cycloïde Square* (2024) takes the form of a sculpture-model complexifying the expected forms of a skatepark, evoking both an abstract sculpture by Sophie Taeuber and the astronomical observatory in Jaipur, India, the *Cycloïde Piazza* (2024) will be on view all summer, a few blocks from the gallery on the forecourt of the Centre Pompidou. An "instrumental" sculpture in public space, it becomes a practicable space for gliding, an agora, an amphitheater, a place that encourages movement as well as rest, a piazza within a

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<sup>1</sup> Raphaël Zarka, *Free Ride. Skateboard, mécanique galiléenne et formes simples*, Éditions B42, Paris, 2021, p.90

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piazza. Here, the traditional arched ramps of skateparks are transformed into cycloids, with stairs, platforms, tiers, and slopes, inviting us to test the Galilean laws of gravity with this geometric vocabulary.

This back-and-forth between works designed for the exhibition space and for the public space, between site and non-site, value of use and of exhibition, is evident in *La Doublure* (2024) designed as part of the Nouveaux Commanditaires program in Trélazé, Maine-et-Loire. In architectural resonance with a former match manufacture, it combines, with two concrete slabs, the remains of one of the manufacture's chimneys with a new chimney, a 24-metre-high sculpture whose base provides a room opened by four vents, and the surprise of a spiral brickwork assembly that opens onto the sky. Also a practicable sculpture whose function has yet to be invented, its double structure evokes that of the *Second Cénotaphe d'Archimède* (2012), a photo-based reconstruction of 16th-century English brick chimneys named in homage to the creator of the "endless screw". By taking the spiral brick cladding on the chimneys of an English castle and reproducing it inside the lining of an industrial chimney in the French countryside, a dizzying game of echoes and references, translations and re-employments is played out.

This mise en abime of historical and geographical strata finally unfolds in a new series of paintings presented in the exhibition. Entitled *Bois Gnomonique* (2024), it continues the artist's research on gnomons<sup>2</sup> and their functionalist ornamentation. Composed by overlapping and permuting "instrumental motifs" (triangles, circles, semicircles, etc.) taken from the bases of 17th- and 18th-century Scottish sundials, in the continuity of *Abstractions gnomoniques* (2019-2020), these engravings on wood bear witness to the combinatorial systems at the heart of the artist's sculptural practice, applied this time to pictorial matter. Following a set protocol that nonetheless allows for chance through the overprinting of colors, they offer new variations on these motifs, like so many palimpsests. A tautochronous experience in which these witnesses to movement appear on every page in the present tense "in equal times".

— Yoann Gourmel

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<sup>2</sup> "Sundial is one way of putting it, gnomon is another, and these two names for the same object say two different things. The sundial is the archaic ancestor of the clock, an instrument lacking in precision that can be swept away by the first hourglass that comes along; the gnomon, on the other hand, means "he who knows" and reminds us that by marking the movement of shadows, the gnomon was above all an instrument of knowledge." Nina Léger, Zarka Fiction, Suite Galiléenne, La Villa Beatrix Enea, Anglet, 2019.